Heat Pump Control Trainers

Educational Training Equipment for the 21st Century

Bulletin 228-3C

H-HPT-3 Heat Pump Trainer

Purpose

The Hampden **MODEL H-HPT-3** Heat Pump Trainer simulates the split system heat pump. Split system heat pump units are designed for use with a wide variety of fossil fuel furnaces, electric furnaces, air handlers, and evaporator coil combinations.

Description

A heat pump is a heat moving mechanism. Heat is absorbed in an evaporator in one location and released through a condenser in another location. The system can reverse its operation so that the evaporator becomes the condenser and the condenser becomes the evaporator. Heat flow is reversed. By using a special reversing valve, the mechanism either heats or cools the conditioned space. The flow through the compressor is always in the same direction.

Heat pumps use a compression type refrigerating mechanism, similar to a regular refrigerating mechanism. They have two heat transfer surfaces—one located inside the conditioned space and one located outdoors.

Specifications

- · Fused Main Disconnect Switch
- Compressor Contactor
- · Capacitor
- · Low Pressure Switch
- · Heater Relay with Circuit Board (2)
- · Heater Overloads (3)
- · Defrost Sensor
- · Defrost Circuit Board
- · Variable Speed Blower
- · Static Pressure Regulating Damper



MODEL H-HPT-3 Heat Pump Trainer Dimensions: 76.75"H x 60"W x 76.75"D Shipping Weight 567 lbs

- Low Voltage Heat Pump Control Transformer
- Thermostat
- · Four-Way Reversing Valve
- High Pressure Switch
- · Fan Control
- · Programmable Heat Pump Thermostat
- RTD Element
- · Six Electrical Faults

Services Required

Operating voltage is 240 volts AC.

All Hampden units are available for operation at any voltage or frequency



